

**RawMaterials Copernicus [RawMatCop] Programme
2018-2020
2nd Call – May 2019**

**Call for Applications for
Post-Doctoral Research Scholarship Projects
&
Academic Placements to Industry/Governmental
Authorities**

21 May 2019



Contents

1	RawMatCop Introduction	3
2	Call for RawMatCop Post-Doctoral Research Projects and Placement Projects	4
2.1	RawMatCop Eligibility – Who can apply	5
2.1.1	Post-Doctoral Research Projects.....	5
2.1.2	Placement Projects.....	5
2.2	RawMatCop Post-Doctoral Research Projects	5
2.3	RawMatCop Placement Projects	8
2.4	RawMatCop Research Application Areas.....	12
2.4.1	Research Application Area 1 – Raw material prospecting and exploration..	12
2.4.2	Research Application Area 2 – Raw material extraction and mining activities	13
2.4.3	Research Application Area 3 – Secondary raw material resources	14
2.5	RawMatCop Uptake Drivers.....	14
2.5.1	Uptake Driver I – Economies-of-scale	15
2.5.2	Uptake Driver II – Regulatory Compliance	15
3	RawMatCop External Activities – Academy and User Forum	16
3.1	Lifelong Learning activity – RawMatCop Academy	16
3.2	RawMatCop User Forum.....	17
4	Organisation & How to Apply	18
4.1	RawMatCop Manager and the RawMaterials Copernicus Committee (RMCC)..	18
4.2	How to apply	19
4.3	Evaluation and awarding of proposals	19
4.4	Award criteria, scores and weighting	21
4.4.1	RawMatCop Post-Doctoral Research Projects.....	21
4.4.2	RawMatCop Placement Projects.....	23
	Contact details.....	24

Annex 1 Template for RawMatCop Post-Doctoral Research Project Proposals..... 25
Annex 2 Template for RawMatCop Placement Project Proposals 28

1 RawMatCop Introduction

In December 2017, as a result of the call ‘Copernicus building skills actions’ from the European Commission/DG GROW [DG for Internal Market, Industry, Entrepreneurship and SMEs; Space Data and Societal Challenges and Growth/Space Policy, Copernicus and Defence], EIT RawMaterials was awarded a three-year action named ‘RawMaterials Copernicus Programme’ [RawMatCop Programme 2018-2020]. The RawMatCop Programme 2018-2020 extends and builds on the [RawMatCop Programme 2017-2018], a one-year action awarded by the European Commission/DG GROW and EIT RawMaterials as a result of a successful proposal for ‘Building skills and earth observation related expertise through Copernicus’.

The actions of the RawMatCop Programme 2018-2020 will be carried out and coordinated under the RawMaterials Academy.

The aim of the RawMatCop Programme is to develop skills, expertise, demonstrations and applications at the intersection between Earth observation data, specifically Copernicus data, and the raw materials sector.

The Programme covers four activities:

- I. RawMatCop Post-Doctoral Research Projects
- II. RawMatCop Placement Projects
- III. RawMatCop Academy
- IV. RawMatCop User Forum

This Call for Applications only addresses Post-Doctoral Research Projects (I.) and RawMatCop Placement Projects (II.).

In total there will be 3 cohorts of Post-Doctoral Research Projects and Placement Projects spanning the RawMatCop Programme 2017-2018 and RawMatCop Programme 2018-2020 as a result of three Calls for Applications. Heretofore, there have been two RawMatCop Calls for Applications; this is the third and final Call for Applications under the current RawMatCop Programmes, 2017-2018 and 2018-2020. Further information on the Post-Doctoral Research Projects and Placement Projects can be found here - <https://eitrawmaterials.eu/eit-rm-academy/rawmatcop-2/>

Cohort	RawMatCop Programme	Post-Doctoral Research Projects	Placement Projects
1	2017-2018	4	0
2	2018-2020	3	2
3	2018-2020		

Table 1: RawMatCop 2017-2018 & 2018-2020 cohorts and number of Post-Doctoral Research Projects and Placement Projects per cohort

The activities carried out in the RawMatCop Post-Doctoral Research and Placement Projects are focused on three 'Research Application Areas' of the raw materials sector, namely:

- Copernicus data and related data for raw material prospecting and exploration
- Copernicus data for raw material extraction and mining activities
- Copernicus data for secondary raw material resources

The RawMatCop 'Research Application Areas' are explained in more detail in Section 2.4.

2 Call for RawMatCop Post-Doctoral Research Projects and Placement Projects

This is a Call for Applications for RawMatCop Post-Doctoral Research Projects and RawMatCop Placement Projects as part of the RawMatCop Programme 2018-2020 from EIT RawMaterials.

This call [RawMatCop May 2019 Call] is specifically for:

- 2-3 Post-Doctoral Research Scholarship Projects, duration 1 year
- 2-3 Placement Projects, duration 1 year

As part of these projects, the selected Post-Doctoral and Placement Researchers will carry out research, dissemination activities and organize a training programme together with the other successful applicants in Cohort 3, in order to demonstrate how Copernicus/Earth Observation data and services can contribute to the of the RawMatCop Programme 2018-2020 objectives. The training programme will be organized as a short course, officially branded as the '**RawMatCop Academy**', targeting professionals in industry but also other end-users, such as those in academia, the research community and governmental organizations. The goals of the training will be to demonstrate to the learners how RawMatCop post-doctoral and work placement project results which explore new applications of Earth observation and Copernicus data and services can be taken up in their host enterprises/organizations (Lifelong Learning activity).

Similarly, successful candidates of the RawMatCop Programme 2018-2020 will organise and participate in the '**RawMatCop User Forum**', an event bringing together diverse stakeholders from across the raw materials value chain and the Earth Observation/Copernicus community at the end of the RawMatCop 2018-2020 Programme. This 'RawMatCop User Forum' will comprise a series of presentations from the RawMatCop Post-Doctoral and Placement Researchers, as well as from other Copernicus, DG GROW and industrial end-users applying Earth Observation data and services in their organizations. More about the 'RawMatCop User Forum' will be shared in 2019.

2.1 RawMatCop Eligibility – Who can apply

2.1.1 Post-Doctoral Research Projects

EIT RawMaterials Core, Associate and Project Partners of EIT RawMaterials can apply to host and implement the RawMatCop Post-Doctoral Research projects (see Annex 1 and for the list of EIT RawMaterials Partners see <https://eitrawmaterials.eu/about-us/partners/> using a non-Safari web browser).

EIT RawMaterials Partners may suggest several Post-Doctoral Research Projects within one or different ‘Research Application Areas’. Partners may be involved in both Placement and Post-Doctoral Research Projects; moreover, Partners may participate in multiple combinations of host institutions.

2.1.2 Placement Projects

EIT RawMaterials Core, Associate and Project Partners of EIT RawMaterials can apply for an individual academic/research staff member to undertake a temporary placement with an industrial or governmental authority (or similar) which preferably, but not necessarily, is a partner of EIT RawMaterials (see Annex 2 and for the list of EIT RawMaterials Partners see <https://eitrawmaterials.eu/about-us/partners/> using a non-Safari web browser).

Partners may suggest several Placement Projects within one or different ‘Research Application Areas’. Partners may be involved in both Placement and Post-Doctoral Research Projects; moreover, Partners may participate in multiple combinations of host institutions.

2.2 RawMatCop Post-Doctoral Research Projects

What: Investment in RawMatCop Post-Doctoral Research projects. In this Call for Applications EIT RawMaterials will select 2-3 Post-Doctoral Research Projects.

Aim: To develop skills, expertise, demonstrations, and new applications and innovations at the intersection between Earth observation data, specifically Copernicus data, and the raw materials sector.

Who: Core, Associate and Project Partners of EIT RawMaterials joining in a consortium applying to host and implement a RawMatCop Post-Doctoral Research Project. One of the partners in the consortium must be the primary host and beneficiary of the Post-Doctoral Research Project, the grant and the corresponding researcher.

Research Application Areas & Uptake Drivers: The Post-Doctoral Research Projects should fall within one of the three ‘Research Application Areas’ described in Section 2.4. Additionally, projects must also make a

contribution to one of the two 'Uptake Drivers' described in Section 2.5. The research to be carried out must be clearly described with indications of clear objectives and goals (see Section 4.4 and Annex 1).

Contribution to Copernicus Service Areas: In order to demonstrate the significance of the Post-Doctoral Research Project to the Copernicus Service Areas, the Post-Doctoral Research proposals should demonstrate how they contribute to at least one of the six Copernicus Service Areas. The specific Copernicus Service Area the project contributes to must be clearly described (for information on Copernicus Service Areas see <https://www.copernicus.eu/en/services> using a non-Safari web browser) (See Annex 1).

Duration: Each project will run for maximum 12 months.

When: Successful Post-Doctoral Research Proposals are submitted by an EIT RawMaterials Partner and will subsequently recruit and select a post-doctoral researcher to implement the project on behalf of the EIT RawMaterials Partner. The post-doctoral researcher must be recruited, and the projects must commence no later than the end of September 2019. Projects must end 12 months after this date, at the latest.

Scholarship conditions: The conditions normally applicable to post-doctoral scholarships at the host institution will apply. RawMatCop Post-Doctoral budgets will be prepared and submitted according to the 2016-2017 Marie-Curie Work Programme for 'Individual Fellowship'.

Applicants and Host Institutions for the research projects: It is preferable that the Post-Doctoral Research Projects be carried out in cooperation with or supported by two or more EIT RawMaterials Partners, preferably a combination of university/research institutions and industry partners, with one partner indicated in the proposal as the primary host institution. The indicated primary host institution will be the beneficiary of the grant from EIT RawMaterials and will be responsible for recruiting, employing, paying the salary of and physically hosting the post-doctoral scholarship researcher. A primary contact person at the host institution must be specified in the proposal. All EIT RawMaterials partners, as well as external partners involved in the project, should be described in the proposal.

Target groups to benefit from the Post-Doctoral Research Projects: Companies and institutions with expertise in the research and application of Earth Observation and remote sensing data and services.

Budget for the RawMatCop Post-Doctoral Research Projects: The calculation of the costs associated with a RawMatCop Post-Doctoral Research Project (including the scholarship grants) should be in line with the 2016-2017 Marie-Curie Work Programme for 'Individual Fellowship' (see http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-msca_en.pdf using a non-Safari web browser).

The calculation of the total budget should include the 'Post-Doctoral Researcher Cost' and the 'Institutional Cost' according to Table 2 below.

Item	'Post-Doctoral Researcher Cost' (Personnel) (per month)			'Institutional Cost' (per month)	
	Living allowance*	Mobility allowance	Family allowance	Research, Training, Networking costs [includes travel costs for the Post-Doc Researcher]	Management and indirect costs
Individual fellowship	€ 4.650*	€ 600	€ 500	€ 800	€ 650

Table 2: Guidelines and maximum rates for the calculations of the cost of the RawMatCop Post-Doctoral Research project. The costs are subdivided into the maximum cost of the scholarship grant to the post-doctoral researcher recruited under an employment contract/equivalent direct contract and the maximum institutional costs for the host institution hosting the post-doctoral researcher (which include travel costs for the post-doc).

*The 'Living allowance' will be subject to the country correction co-efficients (CCC) to calculate final living allowances according to the country of the institution/company physically hosting the post-doctoral researcher. The country correction coefficients can be found on page 71 in the 2016-2017 Marie-Curie Work-Programme (see link above).

The above 'Mobility allowance' and 'Family allowance' are both maximum amounts per month; these can be less – see in relation to this the maximum possible amount of financial support to a third party (which in the course of these projects are EIT RawMaterials Core, Associate and Project Partners) described below.

Please note that the calculation in the proposal should include the 'Family allowance'. If a recruited candidate for the post-doctoral research project is not eligible to receive 'Family allowance', this will be subtracted from the grant when the project is initiated. In this context 'family' is defined as persons linked to the researcher by (i) marriage, or (ii) a relationship with equivalent status to a marriage recognized by the legislation of the country or region where this relationship was formalized; or (iii) dependent children who are being maintained by the researcher.

These costs are used as principles for estimating the total budget of the RawMatCop Post-Doctoral Research Projects.

IMPORTANT

RawMatCop Host Institutions are eligible to receive maximum EUR 60.000 for the Personnel costs (Living allowance, Mobility allowance, Family allowance) calculated in their budget based on the 2016-2017 Marie-Curie Work Programme for 'Individual Fellowship' in Table 2 above.

This limit is due to the threshold on financial support to a third party, based on the Grant Agreement between DG GROW and EIT RawMaterials GmbH, which is the legal basis for the RawMatCop Programme

2018-2020. Consequently, EIT RawMaterials partners are third party recipients, i.e. subgrantees, of RawMatCop funding.

The 'Post-Doctoral Researcher Cost' will be paid to the primary host institution according to normal principles and existing guidelines for KAVA projects. A modified form of the normal 'Project Agreements' for KAVA projects between EIT RawMaterials GmbH and partners of EIT RawMaterials, i.e. the host institution of the Post-Doctoral Researcher and the recipient of the RawMatCop Post-Doctoral Research Project, will be issued. The host institution will be responsible for employing and paying the Post-Doctoral Researcher.

The 'Institutional Cost'¹ of the primary host institution of the Post-Doctoral Researcher will be managed by EIT RawMaterials GmbH, and subsequently, will be paid directly by EIT RawMaterials GmbH to the EIT RawMaterials Partner (primary host institution) incurring the cost, upon submission of relevant invoices. These costs will be subject to normal EIT RawMaterials regulations (e.g. Travel Policy); explanation will be provided in the course of preparing the projects.

Cost type	Calculation Method	Maximum Amount	Payment Method
Post-Doctoral Researcher Cost	2016-2017 Marie-Curie Work Programme for 'Individual Fellowship' in Table 2	EUR 60.000	EIT RawMaterials payment to primary host institution administered by a Project Agreement
Institutional Cost		EUR 17.400	Primary host institution to invoice 'Institution Costs' to EIT RawMaterials

Table 3: Summary of the calculation method, maximum amount and payment method for the 'Post-Doctoral Researcher Cost' and 'Institutional Cost'

Financial reporting: All costs must be eligible and proven according to EIT RawMaterials standards, in the event of an audit of the primary host institution of a RawMatCop Post-Doctoral Research Project.

Grant Payment Scheme: The primary host institution of the RawMatCop Post-Doctoral Research Project will receive pre-financing based on the existing guidelines for KAVA projects.

2.3 RawMatCop Placement Projects

What: Funding of up to 2-3 RawMatCop Placement Projects.

Aim: Temporary placements for academic researchers in industry, companies and public authorities (the 'Placed Researcher'). The Placed Researcher, representing the research-oriented partner of EIT RawMaterials, is able to apply their knowledge, transfer skills and develop and/or strengthen the

¹ 'Institutional Costs' are those project costs related to travel, accommodation during travel, training, participation in conferences, networking etc.

application and use of Earth Observatory/Copernicus and remote sensing data at the Host Partner of the placement. It is preferable, but not pre-requisite, that the Host Partner be an industry partner from the EIT RawMaterials community or governmental authority. Placement project proposals which involve the maturing of previous post-doctoral research through the placement mechanism are encouraged.

Who: It is compulsory that one partner of the proposal to be a research-oriented Partner of the EIT RawMaterials community (University or RTO partner). The Host Partner must be an Industry partner or an applied- or policy-oriented RTO partner of, preferable but not limited to, the EIT RawMaterials community. Alternatively, the Placed Researcher could carry out his/her project within a (inter)governmental authority or international organization.

The Placed Researcher from the research-oriented partner of EIT RawMaterials must be identified and is required to co-sign the proposal.

The proposal must be submitted by the research-oriented partner of EIT RawMaterials.

Placement Research Application Areas & Uptake Drivers: The placements should fall within one of the three 'Research Application Areas' described in Section 2.4. and should additionally also make a contribution to one of the 'Uptake Drivers' described in Section 2.5. The placement to be carried out by the Placed Researcher must be clearly described according to the 'Research Application Areas' with indications of planned work, the foreseen application and transfer of knowledge and skills (see Section 4.4 and Annex 2). This description should also include how the knowledge and experience acquired during the placement will benefit the Placed Researcher, as well as how the placement will benefit the Placed Researcher's academic/research institution. Finally, the Placed Researcher is encouraged to investigate how EIT RawMaterials business creation vehicles, e.g. the JumpStarter, Start-up and SME Boosters, etc, can contribute to further maturation of a potential technology, extending the impact of the RawMatCop Placement Project.

Contribution to Copernicus Service Areas: In order to demonstrate the significance of the Placement Project to the Copernicus Service Areas, the Placement proposals should demonstrate how they contribute to at least one of the six Copernicus Service Areas. The specific Copernicus Service Area the project contributes to must be clearly described (for information on Copernicus Service Areas see <https://www.copernicus.eu/en/services> using a non-Safari web browser) (See Annex 2).

Duration: Preferably, each placement will run for 12 months. The duration may be shorter but must be no shorter than 6 months.

When: The Placement must commence no later than the end of September 2019. Projects must end 12 months after this date, at the latest

Placement conditions: The conditions normally applicable to the temporary transfer of academic staff to temporary positions in industry/governmental authorities (if these exist and are applicable, e.g. in form of sabbatical leave, temporary attachment to a company, etc.) at the institution will apply.

Physical location: At least half of the period covered by the RawMatCop Placement project should take place at the industry/public authority site.

Applicant and Host:

It is necessary that the placement projects are carried out in cooperation and supported by:

- Research-oriented partner of the EIT RawMaterials community, either university or research-technology organisation (RTO), which is a partner of EIT RawMaterials and the employer of the Placed Researcher.
 - The Placed Researcher must be specified in the proposal by name and position at the research-oriented partner of the EIT RawMaterials community; the Placed Researcher must co-sign the proposal.
 - **This research-oriented partner will be the beneficiary of the grant from EIT RawMaterials.**
- Industry partner or an applied- or policy-oriented RTO partner which preferably, but not necessarily, is a partner of EIT RawMaterials; or a (inter)governmental authority or international organization
 - The Placed Researcher will be hosted by this organisation for the duration of the project; this partner must also co-sign the proposal.

Budget for the RawMatCop Placement Projects: The calculation of the costs associated with a RawMatCop Placement Project (including the scholarship grants) should be in line with the 2016-2017 Marie-Curie Work Programme for ‘Individual Fellowship’ (see http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-msca_en.pdf using a non-Safari web browser).

The calculation of the total budget should include the ‘Placed Researcher Cost and the ‘Institutional Cost’ according to Table 4 below.

Item	‘Placed Researcher Cost’ (per month) (salary to placed researcher’)			‘Institutional Cost’ (per month)	
	Living allowance*	Mobility allowance	Family allowance	Travel and networking costs [funding to support the Placement project]	Indirect costs
Individual fellowship	€ 4.650*	€ 600	€ 500	€ 800	€ 650

Table 4: Guidelines and maximum rates for the calculations of the cost of the RawMatCop Placement Project. The costs are subdivided into the maximum cost of placement (grant/salary to the ‘placed researcher’ which include maximum cost of travel/accommodation under the project and the maximum institutional costs for the research-oriented partner of EIT RawMaterials during the project.

*The ‘Living allowance’ will be subject to the country correction co-efficients (CCC) to calculate final living allowances according to the country of the research-oriented partner of EIT RawMaterials employing the Placed Researcher. The country correction co-efficients are found on page 71 in the 2016-2017 Marie-Curie Work-Programme (see link above).

The above 'Mobility allowance' and 'Family allowance' are both maximum amounts per month; these can be less – see in relation to this the maximum possible amount of financial support to a third party (which in the course of these projects are EIT RawMaterials Core, Associate and Project Partners) described here below.

Please note that the calculation in the proposal should include the 'Family allowance'. If a recruited candidate for the placement is not eligible to receive 'Family allowance' this will be subtracted from the grant when the project is initiated. In this context 'family' is defined as persons linked to the researcher by (i) marriage, or (ii) a relationship with equivalent status to a marriage recognized by the legislation of the country or region where this relationship was formalized; or (iii) dependent children who are being maintained by the researcher.

The 'Institutional Cost'² of the research-oriented partner of EIT RawMaterials employing the Placed Researcher will be managed by EIT RawMaterials GmbH, and subsequently, will be paid directly by EIT RawMaterials GmbH to the EIT RawMaterials Partner (primary host institution) incurring the cost, upon submission of relevant invoices. These costs will be subject to normal EIT RawMaterials regulations (e.g. Travel Policy); explanation will be provided in the course of preparing the projects.

These costs are used as principles for estimating the total budget of the RawMatCop Placement projects.

IMPORTANT

The research-oriented partner of EIT RawMaterials employing the Placed Researcher is eligible to receive maximum EUR 60.000 for the Personnel costs (Living allowance, Mobility allowance, Family allowance) calculated in their budget based on the 2016-2017 Marie-Curie Work Programme for 'Individual Fellowship' in Table 4 above.

This limit is due to the threshold on financial support to a third party, based on the Grant Agreement between DG GROW and EIT RawMaterials GmbH, which is the legal basis for the RawMatCop Programme 2018-2020. Consequently, EIT RawMaterials partners are third party recipients, i.e. subgrantees, of RawMatCop funding.

The 'Placed Researcher Cost' will be paid to the research-oriented partner of EIT RawMaterials employing the Placed Researcher according to normal principles and existing guidelines for KAVA projects. A modified form of the normal 'Project Agreements' for KAVA projects between EIT RawMaterials GmbH and partners of EIT RawMaterials will be issued. The research-oriented partner will be responsible for employing and paying the Placed Researcher.

The 'Institutional Cost'³ of the research-oriented partner of EIT RawMaterials employing the Placed Researcher will be managed by EIT RawMaterials GmbH, and subsequently, will be paid directly by EIT RawMaterials GmbH to the EIT RawMaterials Partner incurring the cost, upon submission of relevant invoices. These costs will be subject to normal EIT RawMaterials regulations (e.g. Travel Policy); explanation will be provided in the course of preparing the projects.

² 'Institutional Costs' are those project costs related to travel, accommodation during travel, training, participation in conferences, networking etc.

³ 'Institutional Costs' are those project costs related to travel, accommodation during travel, training, participation in conferences, networking etc.

Cost type	Calculation Method	Maximum Amount	Payment Method
Placed Researcher Cost	2016-2017 Marie-Curie Work Programme for 'Individual Fellowship' in Table 4	EUR 60.000	EIT RawMaterials payment to the research-oriented partner of EIT RawMaterials employing the Placed Researcher administered by a Project Agreement
Host Cost		EUR 17.400	'Institution Cost' of the research-oriented partner of EIT RawMaterials employing the Placed Researcher to be managed via EIT RawMaterials

Table 5: Summary of the calculation method, maximum amount and payment method for the 'Placed Researcher Cost' and 'Institutional Cost'

Financial reporting: All costs must be eligible and proven according to EIT RawMaterials standards, in the event of an audit of the research-oriented partner of EIT RawMaterials employing the Placed Researcher.

Grant Payment Scheme: The indicated research-oriented EIT RawMaterials Partner employing the Placed Researcher will receive pre-financing based on existing guidelines for KAVA projects.

2.4 RawMatCop Research Application Areas

EIT RawMaterials Core, Associate and Project Partners are invited to propose content related to the application and research of Copernicus and related data within the following three Research Application Areas described in the following sub-chapters.

2.4.1 Research Application Area 1 – Raw material prospecting and exploration

Aim: Development of new, efficient and innovative methods and applications; or detecting raw material deposits; or targeting areas with high mineral potential using Copernicus data.

Accessible and high-grade deposits in Europe are mostly exhausted or currently mined, meaning exploration must focus on remaining, more remote locations or penetrate much deeper into the Earth's crust. Sustaining mining activities in Europe would allow both the development of key technologies and the sustainable and ethical resource exploitation.

Space-borne data enables large-scale studies in prospecting, vegetation and land-use (change). However, new methods are needed for geological applications as the development of space-borne sensors with adequate spectral and spatial resolution has stagnated and/or there are none available. Hyperspectral mapping, currently the tool of choice in mineral exploration, cannot be used in Europe until the EnMap satellite is launched in a few years. Airborne data acquisition provides a much higher resolution and better signal-to-noise ratios but is long and complex in terms of preparation and data processing. There is also a gap between the scales of airborne and ground-based data in terms of spatial resolution. Unmanned Aerial Systems (UAS) are flexible, easy to use, and can overcome this gap and provide multi-temporal data at cm-scale resolution. However, they are not yet used in exploration.

Suggested topics (not exhaustive):

- Advancements in multi-scale and multi-sensor remote sensing-based Earth integration techniques. Scale should range from satellite to air- and drone-borne systems and include ground/in-situ validation. The successful proposal should demonstrate that the integration of different sensors, at different scales and including data provided by Copernicus, allows the accurate detection of potential zones with critical raw materials (as defined by the EU).
- Multi-sensor downscaling methods involving SAR and optical data are particularly in demand, but any initiatives within the scope of this call are welcome.
- Integration with other sensors and or measures such as geophysical/geochemical data are of interest, as well as non-conventional uses of remote sensing data content (texture, geometry, geomorphometry etc.).

2.4.2 Research Application Area 2 – Raw material extraction and mining activities

Aim: Concentration on the innovative use and application of Copernicus data in connection with other relevant datasets in already identified deposits and/or in current or abandoned mine sites.

Copernicus data and services allow end users to plan, delineate, monitor and evaluate various factors associated with the mining and extraction of raw materials, including environmental impact. The data provides cost-effective solutions to complex and important issues which have a significant impact on extraction and the optimization of mining.

Suggested topics (not exhaustive):

- Optimisation of mining activities in specific mine site(s), monitoring water quality around and/or at mine site(s), monitoring ground movement (subsidence and uplift) due to underground mining or vegetation changes during mining /post mining.
- Monitoring of mine dumps and tailings concerning slope and dam stability, movements, erosion, vegetation changes and water management.

- Development of new applications or instrumentation that apply Copernicus data for raw material extraction and mining.

2.4.3 Research Application Area 3 – Secondary raw material resources

Aim: Exploration of innovative use and application of Copernicus Sentinel-2 data or higher resolution data from Copernicus contributing missions in the field of secondary raw materials.

Copernicus data can be used to evaluate the environmental impact of waste and residue management activities. Knowledge gained from monitoring mine tailings etc. can be applied to residue stocks of (metal) production and processing industries.

Proposals addressing secondary raw materials will be particularly encouraged as the projects from the last two RawMatCop cohorts have addressed primary raw materials activities in Research Applications Areas 1 & 2.

Suggested topics (not exhaustive):

- Historical and new tailings from mining operations, residues from industrial processes, or stocks and flows of waste and (used) products (landfill mining and urban mining). New applications may be developed to evaluate and track materials through the value chain and the assessment of supply-demand scenarios.
- Vegetation indices derived from Earth Observation data can indicate plant health by showing spectral differences caused by changes in leaf pigments and internal leaf structure because of vegetation stress.
- Uncontrolled landfills and dumpsites of municipal solid waste are considered a main threat to public health in many countries. Impacts on drinking water bodies, air pollution through uncontrolled fires and direct exposure to hazardous compounds cause high risks to the surrounding communities. Earth observation data may be applied to investigate the causes, impacts and effects of landfills.
- A sustainable circular economy requires information about material and product volumes and movements, both in the use and waste phases. Earth observation can be used to inventory solar panels, air coolers, car stocks, oil reserves, etc., which typically requires the use of high resolution images. New applications can be developed to support elements for a circular economy: the study of socio-economic trends and the evaluation of material use and supply.
- If airborne hyperspectral images of the same test site are also available, they can be compared to Sentinel-2 MSI images to determine their potential for the assessment of waste and residue management activities. This could lead to recommendations for future satellite missions.

2.5 RawMatCop Uptake Drivers

Copernicus data and services are:

- Publicly available and open access

- Free of costs
- Relevant through regular updates, with 12 terabytes of new data generated daily
- Tailor-made to the specific needs of downstream Copernicus users

Therefore, RawMatCop Post-Doctoral Research and Placement Researchers should demonstrate how their results could be practically applied and how they would contribute to securing primary and secondary raw material supply vital for the European industry. Included in the research and placement activities, RawMatCop projects must explore at least one of the Copernicus Uptake Drivers illustrated below.

2.5.1 Uptake Driver I – Economies-of-scale

Demonstrating cost-effectiveness and economies-of-scale achieved by incorporating the research and placement results operationally within a company setting or governmental authority will contribute to the validation of its application. Should Post-Doctoral and Placement projects contribute to securing supply of primary and secondary raw materials, this Uptake Driver could contribute to extended application by raw materials end-users addressed by the Post-Doctoral and Placement projects.

Examples of issues relevant for this Uptake Driver I (not exhaustive):

- The delivery of cost-effective, timely and comprehensive monitoring solutions for mining activities.
- Increasing safety in and around mines using low-cost and low-maintenance ground stability monitoring tools.

2.5.2 Uptake Driver II – Regulatory Compliance

Stakeholders involving in the prospecting, mining and extraction of primary and secondary raw materials must comply with various European, National and Local regulations. Legislation addressing primary raw material activities include but are not limited to:

- (i) EU Directive on minimum requirements for improving the safety and health protection of workers in the extractive (Directive 92/91/EC) European Commission industries;
- (ii) EU Directive on the management of waste from extractive industries (Directive 2006/21/EC);
- (iii) Directive on minimum requirements for improving the safety and health protection of workers in surface and underground mineral-extracting industries (Directive 92/104/EEC);
- (iv) Directive on industrial emissions (integrated pollution prevention and control) (Directive 2010/75/EU)⁴

⁴ MIN-GUIDE report on ‘Taking stock on EU and EU MS mineral policy and legislation, Deliverable 2.1, Version 1’

Illustrating how Copernicus data and services can support upstream and downstream actors to proactively comply with EU, national and local legislation could be a salient driver, demonstrating the significance of Copernicus data and/or services to industry and governmental authorities.

Example of issue relevant for this Uptake Driver II (not exhaustive):

- Enhancing transparency with public stakeholders regarding mining activities
- Pro-active monitoring of environmental impacts supported by publicly-available data (e.g. social license to operate)

3 RawMatCop External Activities – Academy and User Forum

3.1 Lifelong Learning activity – RawMatCop Academy

The results of the RawMatCop 2018-2020 Post-Doctoral Research projects and Placement projects, along with Copernicus data and services, will be disseminated through a Lifelong Learning activity, entitled the '**RawMatCop Academy**'.

Both the Post-Doctoral and Placement Researchers will play an active role in developing the course learning objectives, course content and organization of the RawMatCop Academy, building on and incorporating results from their research and placement projects in the course content. They will also be responsible for the organization and delivery of the entire RawMatCop Academy, with advising from the RawMaterials Copernicus Committee and support from the RawMatCop Project Manager.

Description: Short course targeting professionals and existing as well as potential new end-users of Earth observation data, especially Copernicus data. Participation in the RawMatCop Academy will be publicly open and will be offered to partners of other EIT Innovation Communities (KICs) which will facilitate knowledge, skills and technology transfer.

When: As suited according to the post-doctoral scholarship and placement schedules.

Duration: 3–4 days.

Organised and managed by: The RawMatCop Post-Doctoral and Placement Researchers and EIT RawMaterials via its RawMaterials Academy.

Target group: Target group will be defined more precisely depending on the results of the Post-Doctoral research and Placement projects, but is likely to include geologists, geophysicists, geotechnical staff, geodata and satellite data users, geotechnical engineers, regulators, land-use managers, etc. from authorities, industry and academia.

Content and delivery: Teaching, lectures and hands-on exercises will focus on the application of Copernicus Earth observation data. The RawMatCop Post-Doctoral and Placement Researchers, with support from experts from their Host Institutions, will organize and deliver the course with support from the RawMaterials Academy and technical advising from RawMaterials Copernicus Committee. Experts from other EIT RawMaterials partners or external sources will also contribute if required.

Recruitment of participants: Via EIT RawMaterials partner network and public announcements.

3.2 RawMatCop User Forum

All three cohorts of Post-Doctoral and Placement Researchers from the RawMatCop 2018-2020 Programme and RawMatCop 2017-2018 Programme, together with EIT RawMaterials partners, the wider community of Earth Observation/Copernicus users and partners of other EIT Innovation Communities (KICs) will be brought together at a large event, tentatively entitled the '**RawMatCop User Forum**'.

This event will include a series of lectures and a training workshop which should be jointly planned and executed by current and former RawMatCop 2017-2018 & 2018-2020 Post-Doctoral and Placement Researchers. Post-Doctoral and Placement researchers from all RawMatCop cohorts will play an active role in developing the material for the lectures and the training workshop to be delivered at the RawMatCop User Forum. Similarly, they will also be responsible for the selection and securing of guest speakers for the event.

Description: The RawMatCop User Forum will target professionals from the entire raw materials value chain as well as existing and potential end-users of Earth observation data, especially Copernicus data. Participation in the event will be publicly open and will be offered to partners of other KICs which will facilitate knowledge, skills and technology transfer.

When: In the second half of 2020 and as suited according to the Post-Doctoral and Placement work plans.

Duration: 1-2 days.

Organised and managed by: The RawMatCop Post-Doctoral and Placement researchers (current and former cohorts), EIT RawMaterials partners involved in RawMatCop Activities and EIT RawMaterials via its RawMaterials Academy.

Target group: This group will be defined more precisely once organisation of the event commences. Nonetheless the selection criteria will aim to boost the dissemination of research results from all cohorts of RawMatCop 2017-2018 and 2018-2020 Programmes, as well as showcase to the raw materials community the potential of earth observation data and services, especially Copernicus data.

Content and delivery: This event will include a series of lectures and workshops disseminating and building on the knowledge generated through RawMatCop 2018-2020 as well as a training workshop. RawMatCop Post-Doctoral and Placement Researchers and experts from their host institutions will organize and contribute to the delivery of the specialist lectures as well as the training workshop with support from the RawMaterials Academy and technical advising from RawMaterials Copernicus Committee. Experts from other EIT RawMaterials Partners or external sources will also contribute.

Recruitment of participants: Via EIT RM partner network and public announcements.

4 Organisation & How to Apply

4.1 RawMatCop Manager and the RawMaterials Copernicus Committee (RMCC)

The RawMatCop 2018-2020 Programme is managed and coordinated by the RawMatCop Manager under RawMaterials Academy. The RawMatCop Manager will facilitate, coordinate and support the RawMatCop Post-Doctoral Research and Placement projects for the entire RawMatCop 2018-2020 Programme. EIT RawMaterials established a RawMaterials Copernicus Committee (RMCC), consisting of EIT RawMaterials staff and representatives from the European Commission and/or Copernicus.

The RMCC is led and steered by the Head of Academy and RawMatCop Manager who is responsible for coordinating the technical, scientific and institutional advising by the RMCC to the RawMatCop 2018-2020 Programme.

Moreover, the RawMatCop Manager, will support the organization and initiation of (estimated maximum) **three** workshops internally per 12 months/cohort for the Post-Doctoral and Placement Researchers. The RMCC will be present during at least one workshop and at others as determined necessary. These workshops will be used to monitor progress and ensure dialogue between the different projects, whilst also sharing interim and final results to enable the 'RawMatCop Academy' and the 'RawMatCop User Forum' to be developed. The workshops should also ensure that all projects are delivering in-demand end-user products/services and disseminating the results amongst the RawMatCop Projects and to a wider user group.

RawMatCop Post-Doctoral and Placement Researchers will be expected to participate in all 3 workshops. Additionally, virtual meetings will be planned, especially to establish an ongoing cooperation with the RawMaterials Academy.

The RawMaterials Copernicus Committee (RMCC), led by the RawMatCop Manager, will facilitate the following content in the workshops:

Content related to Initial Phase of Projects: Kick Off of the RawMatCop Post-Doctoral Research and Placement Project activities. The first workshop will provide a platform for the Post-Doctoral and Placement Researchers to network and learn from ongoing RawMatCop activities/projects, exchange experience and know-how, discuss the needs of potential end-users/key target groups within the raw materials sector to develop viable products and services. The 'RawMatCop Academy' curriculum and potential participants will be addressed.

Content related to Middle Phase of Projects: Interim workshop focusing on the exchange of experiences and preliminary results of the RawMatCop projects and activities. Experts in Earth observation data who are not directly involved in the RawMatCop 2018-2020 Programme can, on a need to/wanted basis, be invited to support this content. At this stage, the 'RawMatCop Academy' curriculum will be further developed, complemented by programme structure, short-list of expert speakers and definition of group work activities.

Content related to Final Phase of Projects: Final workshop focusing on summarising the results and conclusions and ensuring dissemination of the new applications and services produced by the RawMatCop 2018-2020 Programme. The final workshop will also be used to finalise the programme and logistics for the 'RawMatCop Academy'.

Participants in workshops:

- Members of the RawMaterials Copernicus Committee (RMCC)
- RawMatCop Manager
- Representatives from the RawMaterials Academy
- Recipients of the RawMatCop Post-Doctoral scholarships and Placement projects
- Other senior experts from the host institutions

4.2 How to apply

RawMatCop Post-Doctoral Research and Placement Proposals **should be sent as a PDF file to rawmatcop@eitrawmaterials.eu**.

The deadline for proposals is 5 July 2019 at 12:00:00 CEST.

The proposals should be written according to the template/headings and guidance in the appropriate Annex 1 or Annex 2 of the Call. Annex 3 must also be printed, signed and scanned with your application, as it related to data privacy and GDPR.

The proposal should include a cost calculation according to the earlier stated rules for travel, accommodation and subsistence costs.

4.3 Evaluation and awarding of proposals

Proposals for this call will be evaluated by an external expert Evaluation Panel. The Evaluation Panel is appointed and established by EIT RawMaterials and will consist of relevant experts who do not possess a conflict of interest; after receiving all proposals, each external expert will be required to declare no 'Conflict of Interest' exists and subsequently sign an official 'Conflict of Interest' form.

Based on the results from the Evaluation Panel, EIT RawMaterials will award the RawMatCop Post-Doctoral Projects to the primary host institutions and the RawMatCop Placement Projects to the partners named in the proposal.

The primary contact person stated in the proposal will be informed of the outcome. **The outcome of the evaluation is planned to be announced by July 2019.**

A Project Agreement between EIT RawMaterials GmbH and the partner receiving the funds will be signed when a project is awarded.

4.4 Award criteria, scores and weighting

4.4.1 RawMatCop Post-Doctoral Research Projects

1. Proposals for RawMatCop Post-Doctoral Research Projects will be evaluated by the Evaluation Panel, on the basis of the award criteria '**excellence**', '**impact**' and '**quality and efficiency of the implementation**'. The aspects to be considered and the weighting are illustrated in the table below.

RawMatCop Post-Doctoral Projects Award criteria		
Excellence	Impact	Quality and efficiency of the implementation
Quality and credibility of the research/innovation project; level of novelty, appropriate consideration of inter/multidisciplinary aspects	Relevance and impact for the Research Application Areas & Uptake Drivers; enhancing the potential and future career prospects of the researcher	Coherence and effectiveness of the work plan
Quality and appropriateness of the training and of the two-way transfer of knowledge between the researcher and the host	Quality of the proposed measures to exploit and disseminate the project results; relevance for the RawMatCop Academy and for EIT RawMaterials' vision, mission and objectives (see EIT RawMaterials Strategic Agenda 2018-2022 ⁵)	Appropriateness of the allocation of tasks and resources
Quality of the supervision and of the integration in the team/institution	Quality of the proposed measures to communicate the project activities to different target audiences and quality of proposed measures to strengthen RawMatCop's dissemination strategy	Appropriateness of the management structure and procedures, including risk management
Capacity of the researcher to reach or re-enforce a position of professional maturity/independence	Potential for new innovative applications/products/services created from the project. Entrepreneurial components included/potential in the project	Appropriateness of the institutional environment (infrastructure)
50%	30%	20%
Weighting		
1	2	3
Priority in case of ex aequo		

⁵ EIT RawMaterials Strategic Agenda 2018-2022 can be found here - <https://eitrawmaterials.eu/strategic-agenda-2018-2022/>

2. Evaluation scores will be awarded for each of the criteria in the three Award criteria categories. Each criterion will be scored from 0 to 5 with half-scores possible.

3. If necessary, the Evaluation Panel will determine a priority order for proposals which have been awarded the same score within a ranked list. When the total scores are equal, priority will be based on scores for individual award criteria.

4. If necessary, any further prioritisation will be based on other appropriate characteristics, to be decided by the Evaluation Panel, by the RMCC and the RawMatCop management team at EIT RawMaterials. Further prioritisation will be related to e.g. the contribution of the proposal to the objectives and scope of the EIT RawMaterials, thematic balance, diversity of partners/location of execution, etc.

4.4.2 RawMatCop Placement Projects

1. Proposals for RawMatCop Placement Projects will be evaluated by the Evaluation Panel, on the basis of the award criteria '**excellence**', '**impact**' and '**quality and efficiency of the implementation**'. The aspects to be considered and the weighting are illustrated in the table below.

RawMatCop Placement Projects Award criteria		
Excellence	Impact	Quality and efficiency of the implementation
Quality, credibility and appropriateness of the know-how/technology transfer	Relevance and impact of the know-how/skills/experience/technology transfer for Research Application Areas & Uptake Drivers – for all partners involved in the Placement	Coherence and effectiveness of the planned work during the Placement, quality of the proposed measures to exploit and disseminate know-how/skills/experience/technologies
Quality and relevance of individual academic researcher placed at the host of the Placement (industrial partner/ governmental authority partner)	Quality, experience and skills of the Placed Researcher	CV and experience of the Placed Researcher involved in the Placement, earlier bilateral work/cooperation, etc.
Level of novelty, creation of new applications/skills/utilization of data at the host of the Placement (industrial partner/ governmental authority partner)	Evolve, build competencies and develop new utilization within involved partners in the Placement; enhancing the potential and future career prospects of the Placed Researcher	Coherence and effectiveness of the work plan
Quality and appropriateness of the training and of the two-way transfer of knowledge through the RawMatCop Academy	Quality of the proposed measures to exploit and disseminate the project results and relevance for the RawMatCop Academy and for EIT RawMaterials' vision, mission and objectives (see EIT RawMaterials Strategic Agenda 2018-2022 ⁶)	Appropriateness of the allocation of tasks and resources, implementation
Quality of the integration in the team/institution	Quality of the proposed measures to communicate the project activities to different target audiences and quality of proposed measures to strengthen RawMatCop's dissemination strategy	Appropriateness of the management structure and procedures, including risk management
Capacity of the Placed Researcher/partners to reach or reinforce a position of professional	Potential for new innovative applications/products/services and skills/tech. transfer created from the	Appropriateness of the environments of partners involved in the Placement (infrastructure)

⁶ EIT RawMaterials Strategic Agenda 2018-2022 can be found here - <https://eitrawmaterials.eu/strategic-agenda-2018-2022/>

maturity/independence and capacity of the project to mature previous post-doc research through the placement mechanism	project. Entrepreneurial components included/potential in the project	
50%	30%	20%
Weighting		
1	2	3
Priority in case of ex aequo		

2. Evaluation scores will be awarded for each of the criteria in the three Award criteria categories. Each criterion will be scored from 0 to 5 with half-scores possible.

3. If necessary, the Evaluation Panel will determine a priority order for proposals which have been awarded the same score within a ranked list. When the total scores are equal, priority will be based on scores for individual award criteria.

4. If necessary, any further prioritisation will be based on other appropriate characteristics, to be decided by the Evaluation Panel, by the RMCC and the RawMatCop management team at EIT RawMaterials. Further prioritisation will be related to e.g. the contribution of the proposal to the objectives and scope of the EIT RawMaterials, thematic balance, diversity of partners/location of execution, etc.

Contact details

For more information about the RawMatCop Programme and the Call for RawMatCop Post-Doctoral and Placement projects, please contact the RawMatCop Management Team:

Irene Benito Rodriguez, RawMatCop Manager

EIT RawMaterials GmbH

M: +49 162 25 84 850

E: irene.benito@eitrawmaterials.eu

Wesley Crock, Head of Academy

EIT RawMaterials GmbH

M: +49-162 32 60 763

E: wesley.crock@eitrawmaterials.eu

Patrick Nadoll, Senior Advisor Exploration and Resource Assessment

EIT RawMaterials GmbH

M: +49-162 43 17 395

E: patrick.nadoll@eitrawmaterials.eu

Annex 1

Template for RawMatCop Post-Doctoral Research Project Proposals

The proposal for the RawMatCop Post-Doctoral Research Projects should contain the following sections.

Project Title [max ca 20 words]

- The title of the project must reflect the content.
- Short and precise.

Executive summary [max 300 words]

- A short, general summary of the proposed project.

Aims and Objectives [max 1 page]

- Describe the overall aim and objectives
- Know-how, skills, experience, applications, technology will be transferred laterally between the partners involved.

Relevance to 'Research Application Area & Uptake Drivers' and the governmental/business/industrial area [max 2 pages]

- In terms of new applications/use of remote sensing/Copernicus data/services.
- Description should also clearly state the projects' contribution to the chosen 'Research Application Area' and 'Uptake Drivers'.
- Contribution of the research to a specific Copernicus Service Area.

Bridging of research and practice [max 1 page]

- How and why the proposed project bridges and evolves academic knowledge and practice and/or contributes to new understanding in the professional field.

Approach and Methodology [max 2 pages]

- Describe the approaches and methods that will be used to achieve the objectives, including appropriate consideration of multi/interdisciplinary aspects.
- Outline of planned work/developments – including foreseen dissemination actions.
- Gantt chart of the work plan, describing deliverables, outputs and milestones, also taking into consideration the organizational parameters described in the RawMatCop 2018-2020 Call (this document).

Expected Outcomes [max 1 page]

- Summarise the expected outcomes from your project
- Explanation how the results will innovatively contribute to securing primary and/or secondary raw materials in Europe
- Identify the beneficiaries of the Post-Doctoral Research project results, e.g. new end-user groups

Expected impact (if possible, quantify the expected impact) [max 2 pages]

- Potential for the creation of new innovative applications, products and services from the project.
- Entrepreneurial and innovation opportunities or potential arising from the project.
- Contribution of the Post-Doctoral Research and results to the achievement of the UN Sustainable Development Goals
- Impact of the research results and the applicability of Copernicus data and services in corresponding raw materials industries, including follow-up actions and recommendations.

Communication and Dissemination Plan [max 2 pages]

- Develop a Communication and Dissemination Plan which addresses the following
 - Target groups addressed
 - Conferences, workshops or symposia where the Post-Doctoral Researcher will present his/her project and results
 - Scientific, peer-reviewed journals to publish the results of the Post-Doctoral Research project
 - EIT RawMaterials events, channels and fora where the Post-Doctoral Researcher will communicate his/her project and results
- Describe the role the project can play in communicating/portraying RawMatCop Programme success and the achievement of programme mission and objectives.

Potential Risks and Issues [max 1 page]

- Prepare a risk assessment. (i) Identify possible risks; (ii) quantify and qualify their impact on the project; (iii) identify the likelihood the identified risks could arise; (iv) and develop a mitigation/remediation strategy to address the identified risks, accordingly.

Relation to the RawMatCop Academy and relation to EIT RawMaterials [max 1 page]

- Summarise the expected deliverables/teaching activities the project can provide to the RawMatCop Academy.
- Summarise how the content delivered in the RawMatCop Academy contributes to the EIT RawMaterials' vision, mission and objectives.

Organisation of the project [max 1 page]

- Contact person for the proposal.
- Specify the primary host institution (beneficiary of the grant) and roles of partners (partner organisations) involved.
- Specify the individual academic researcher who will undertake the post-doctoral research, if already known – include a short description of expertise, experience and former work. Attach a full CV of the researcher.
- Specify individuals from host institutions who will support the project/the post-doctoral researcher [name, position, short description of the support/cooperation, max 100 words per

individual] as well as describe the two-way knowledge transfer between the researcher and primary host institution and partner organizations.

Calculation of cost of the proposed RawMatCop Post-Doctoral Research project [max 2 pages]

- See also Table 2 and Table 3 in this Call.
- The proposal should include a cost calculation for the Post-Doctoral Research project. The cost calculation of each Post-Doctoral Research project should be in line with the 2016-2017 Marie-Curie Work-Programme for 'Individual Fellowship' (see http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-msca_en.pdf).
- Value of the grant should include the 'Post-Doctoral Researcher Cost' and the 'Institutional Cost' according to Table 2 and Table 3 in this document and found in the Marie-Curie 2016-2017 Work-Programme link above.
- Cost calculation should contain the researcher full-time equivalent person month costs as well as his/her foreseen travel/accommodation/subsistence costs related to the monthly 'Mobility allowance'.
- The travel and related accommodation/subsistence costs should consider the three 1-2 day workshops/review meetings, the 4-day RawMatCop Academy and the 1-2 day RawMatCop User Forum; as well as other foreseen travel necessary for implementing the research project and communication and dissemination plan.
- The workshops/review meetings, the RawMatCop Academy and the RawMatCop User Forum will, most likely, be held at EIT RawMaterials GmbH in Berlin, at participating host institutions and/or in Brussels (Copernicus facilities).

Annex 2

Template for RawMatCop Placement Project Proposals

The proposal for the RawMatCop Placement Projects should contain the following sections.

Project Title [max ca 20 words]

- The title of your project must reflect the content.

Executive summary [max 300 words]

- A short, general summary of the proposed project.

Aims and Objectives [max 1 page]

- Supply an overall aim and objectives that the research will address.

Relevance to ‘Research Application Area & Uptake Drivers’ [max 1 page]

- Should include relevance to the research area, the development of new applications/use of remote sensing/Copernicus data/services and relevance for the business and industrial sector related to the area.
- Description should also clearly state the projects’ contribution to the chosen ‘Research Application Area’ and ‘Uptake Drivers’.
- Contribution of the research to a specific Copernicus Service Area.

Previous research and development related to the project [max 1 page]

- How the proposed research addresses the existing body of academic knowledge and practice in the professional field.
- How the Placement project will enhance knowledge or contribute to new understanding in the subject.
- How will the Placement mechanism allow previous post-doctoral research of the individual staff member carrying out the placement to mature and progress.

Research Approach and Methodology [max 2 pages]

- Describe the approaches and methods that will be used to achieve the objectives, including appropriate consideration of multi/interdisciplinary aspects.
- Explain how know-how/skills/experience and technology be transferred laterally between the partners involved.
- Outline of planned work/developments – including foreseen dissemination actions.

- Gantt chart of the work plan, describing deliverables, outputs and milestones, also taking into consideration the organizational parameters described in the RawMatCop 2018-2020 Call (this document).

Expected Outcomes [max 1 page]

- Summarise the expected outcomes from the project.
- Describe how the Placement project results will innovatively contribute to securing primary and/or secondary raw materials in Europe.
- Identify the beneficiaries of the Placement project results, e.g. new end-user groups.

Expected impact (where possible, please quantify the expected impact) [max 2 pages]

- Potential for the creation of new innovative applications, products and services from the project; potential for the development of new utilisation of Copernicus data and services; potential of building up new governmental services & application or new business area/services.
- Entrepreneurial and innovation opportunities or potential arising from the project.
- Contribution of Placement research and results to the achievement of the UN Sustainable Development Goals.
- Impact of the Placement research results and the applicability of Copernicus data and services in corresponding raw materials industries, including follow-up actions and recommendations.

Communication and Dissemination Plan [max 2 pages]

- Develop a Communication and Dissemination Plan which addresses the following
 - Target groups addressed.
 - Conferences, workshops or symposia where the Placed Researcher will present Placement project and results.
 - Scientific, peer-reviewed journals to publish the results of the Placement project
 - EIT RawMaterials events, channels and fora where the Placed Researcher will communicate the project and results.
- Summarise how the individual project can contribute to the overarching RawMatCop Programme dissemination strategy.
- Describe the role the project can play in communicating/portraying RawMatCop Programme success and the achievement of programme mission and objectives.

Potential Risks and Issues [max 1 page]

- Prepare a risk assessment. (i) Identify possible risks; (ii) quantify and qualify their impact on the project; (iii) identify the likelihood the identified risks could arise; (iv) and develop a mitigation/remediation strategy to address the identified risks, accordingly.

Relation to the RawMatCop Academy and relation to EIT RawMaterials [max 1 page]

- Summarise the expected deliverables/teaching activities that the project can provide to the RawMatCop Academy.
- Summarise how the content delivered in the RawMatCop Academy contributes to the EIT RawMaterials' vision, mission and objectives.

Organisation of the project [max 2 page]

- Contact person for the proposal.

- Specify the partner currently employing the individual academic researcher that will carry out the Placement Project – a short description of this partner, its excellence and its support to/interest in the Placement.
- Specify the governmental authority / industry / company that will take part in the Placement– and be the primary host of the academic researcher. Include a short description of this partner, its excellence, why the Placement will evolve and add to the partner’s competencies. Specify a contact person at this partner.
- Specify the individual academic researcher that will undertake the Placement – include a short description of expertise, experience and former work. Describe any former work and cooperation with industry/governmental authorities. Attach a full CV of the researcher.

Calculation of cost of the proposed RawMatCop placement project [max 2 pages]

- See also Table 4 and Table 5 in this Call.
- The proposal should include a cost calculation for the Placement Project. The cost calculation should be in line with the 2016-2017 Marie-Curie Work-Programme for ‘Individual Fellowship’ (see http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-msca_en.pdf).
- Value of the grant should include the ‘Placed Researcher Cost’ and a ‘Institutional Cost’ according to Table 4 and Table 5 in this Call.
- Cost calculation should contain the researcher full-time equivalent person month costs as well as his/her foreseen travel/accommodation/subsistence costs related to the monthly mobility allowance.
- The travel and related accommodation/subsistence costs should consider the three 1-2-day workshops/review meetings, the 4-day RawMatCop Academy and the 1-2 day RawMatCop User Forum; as well as other foreseen travel necessary for implementing the research project and communication and dissemination plan.
- The workshops/review meetings, the RawMatCop Academy and the RawMatCop User Forum will, most likely, be held at EIT RawMaterials GmbH in Berlin, at participating host institutions and/or in Brussels (Copernicus facilities).

Annex 3

EIT RawMaterials privacy policy and data usage consent form

EIT RawMaterials GmbH will store and process the personal data which you have supplied as part of your application to the RawMatCop 2018-2020 call. This information will be stored and processed for the purpose of assessing your application and contacting you about it.

EIT RawMaterials will not pass your personal data to any third party. You may at any time request to see the information that we hold about you, and to request its deletion, by contacting academy@eitrawmaterials.eu. For full details, please see our privacy policy at <https://eitrawmaterials.eu/privacy-policy/>.

I agree that EIT RawMaterials may store and process my personal data in line with its privacy policy, as defined at the above link. I have been informed that I can withdraw this consent in the future, in whole or in part.

You must select this option so that we can contact you about your application.

I also would like to hear from EIT RawMaterials by email about:

- Future education programmes and opportunities from the RawMaterials Academy
- Innovation and business support opportunities from EIT RawMaterials
- EIT RawMaterials Alumni Association

Name (block capitals): _____

Email address: _____

Signature: _____

Date: _____ Place: _____